

BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554

In the matter of:

Carrier Current Systems, Including  
Broadband Over Power Line Systems

ET Docket No. 03-104

Amendment Of Part 15 Regarding New  
Requirements And Measurement  
Guidelines For Access Broadband Over  
Power Line Systems

ET Docket No. 04-37

**REPLY COMMENTS OF THE CALIFORNIA PUBLIC UTILITIES  
COMMISSION AND OF THE PEOPLE OF THE STATE OF CALIFORNIA  
ON THE NOTICE OF PROPOSED RULEMAKING REGARDING  
BROADBAND OVER POWER LINE SYSTEMS**

The California Public Utilities Commission and the People of the State of California (California or CPUC) submit these Reply Comments to the Federal Communications Commission (FCC or Commission) on its Notice of Proposed Rulemaking (NPRM) Regarding Carrier Current Systems, including Broadband Over Power Line Systems, released on February 23, 2004. In accordance with the NPRM, CPUC herein responds to the comments filed by amateur radio operators, trade associations/organizations, equipment manufacturers, telephone companies, electric utility companies, and other parties.

## **I. Level of Interference**

The CPUC notes that there is significant disagreement among the commenters regarding the level of interference that Broadband over Power Line (BPL) will have on other services. BPL equipment manufacturers and vendors strongly advocate for the deployment of BPL technology and state that any technical issues, including the potential interference that BPL may have on other services, are resolvable and can be mitigated. Amateur radio operators, radio astronomers and short wave broadcasters and users oppose the deployment of BPL technology because they believe BPL systems will cause a substantial interference for existing High Frequency (HF) spectrum users. Trade associations assert that the potential for “harmful interference” by BPL is real. For example, the Institute of Electrical and Electronic Engineers, Inc. (IEEE-USA) believes that the FCC’s proposals for interference mitigation are inadequate in terms of being effective or resulting in the timely mitigation of interference problems in practice. (IEEE-USA Comments, p. 4.) Thus, before BPL can be deployed, they assert that an unbiased, scientific analysis must be performed and the technology must be tested.

Since BPL is very much in its infancy, we also believe that adequate testing and unbiased field trials are necessary in order to determine and identify the scope of the potential interference that BPL may have on other services, including voice, radio, DSL and cable modem broadband services.

## **II. Effect on Competition and Deregulation**

The CPUC generally supports the Commission's efforts to promote competition in the telecommunications market as well as the Commission's efforts to develop additional competition in the offering of broadband infrastructure. However, given that BPL is still very early in its development, it has not yet shown to be a viable and robust alternative to other broadband services such as DSL and cable modem. Hence, the FCC should not rush to further deregulate all broadband services at this time. Rather, the FCC should consider what changes, if any, are needed to the current regulatory scheme, after extensive testing has been performed and industry standards have been developed for BPL systems.

## **III. Notification Requirement**

The NPRM proposes a notification requirement for Access BPL system operators. (NPRM ¶ 43). Under this requirement, Access BPL system operators would submit information on their systems to an industry-operated entity. The purpose of this requirement would be to establish a publicly accessible database for Access BPL information to ensure that the location of Access BPL systems and their operating characteristics are identified if harmful interference occurs and to facilitate interference mitigation and avoidance measures. The notification would include the location of the installation, the type of modulation used and the frequency bands of operation. (*Id.*) The NPRM commenters disagree on this proposal. Main.net, a private company, which develops and markets a complete broadband over power line communication solution,

disagrees with the breadth and scope of information requested in the notification requirement. (Main.net comments, pp. 7-8.) It recommends that if a public database is required, it contain only information on a macro level referencing city and/or town, power utility, Access BPL operator and a toll-free contact number. Main.net further states the FCC's notification proposal could contain sensitive information regarding the electric distribution network. (Id.)

Sprint Corporation (Sprint) states that it is concerned about the competitive consequences of posting information about a provider's network design in an industry database. Sprint believes it would be more efficient and less detrimental to competition to require the local electric power provider to post on its website information about the BPL systems operating over its power lines. (Sprint Comments, p. 4.)

It appears that the purpose of the notification requirement is to provide information to the public about the BPL systems so that they can use this information to contact the appropriate BPL operators when they encounter problems in the system. While this need for public information is important, we also recognize that the need for companies to maintain certain information confidential because disclosure of such information could have a detrimental effect on their ability to do business. Therefore, the Commission should carefully evaluate each type of information that should be included in the BPL database to ensure the interests of both the public and the companies are adequately met.

#### **IV. State Authority**

The CPUC supports the FCC's efforts to examine the BPL technology in order to bring more competition in the broadband markets for American consumers. The CPUC notes that BPL may provide consumers with more choice for Internet and high-speed broadband services, may enable remote, automatic meter reading, may assist in the location of short circuits and may provide broadband access to rural and isolated areas where broadband services do not exist. We also note that BPL may allow power companies to more effectively manage and control their power distribution systems. In so doing however, the CPUC urges the FCC to ensure that California (and other states) are not prohibited from protecting the rights and welfare of California's current telecommunications and electric utility customers, and future BPL subscribers. The FCC should affirm the CPUC's authority to regulate all telecommunications services offered through BPL, including establishing BPL service standards and safety rules, as well as authorizing appropriate utility rate changes. In order to protect consumers, the FCC should also affirm the CPUC's authority to prosecute unlawful utility marketing and billing activities, to govern business relationships between utilities and their affiliates, and to resolve complaints by consumers against BPL service providers.

#### **V. Conclusion**

For all of the foregoing reasons, the CPUC generally supports the FCC's efforts to bring about more competition in the offering of broadband services. However, given that BPL is a nascent service and because there is significant disagreement in the industry

over the level of interference, the FCC should ensure that adequate testing is performed and industry standards are developed before any deployment takes place. In so doing, the FCC must also not preclude state commissions from protecting the rights and welfare of current telecommunications and electric utility customers and future BPL subscribers.

Respectfully submitted,

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